

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,567	03/21/2002	John T. Farnsworth	112701-331	8777
	590 09/22/2004	EXAMINER		INER
BELL, BOYD P. O. BOX 113	& LLOYD LLC		DEL SOLE, JOSEPH S	
CHICAGO, IL 60690-1135			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Summary	10/030,567	FARNSWORTH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Joseph S. Del Sole	1722			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE.	nely filed s will be considered timely. the mailing date of this communication.			
Status					
1) Responsive to communication(s) filed on 29 Ju	<u>ıly 2004</u> .				
2a) ☐ This action is FINAL . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-13 and 17-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>6-13,19 and 21</u> is/are allowed.					
6)⊠ Claim(s) <u>1-5,17,18 and 20</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign p a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau	have been received. have been received in Application by documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:				

Art Unit: 1722

DETAILED ACTION

Applicant's Forthcoming Response

1. The Examiner has noted that the response of 8/19/04 was submitted with Non-Compliant claims. The Examiner reminds the Applicant to submit the claims in the proper compliant format; 37CFR1.121 details the proper compliant format. (While the proper status identifiers were used, the changes were not underlined and/or struckthrough to delineate the changes in the "currently amended" claims). The Examiner requests that whether or not changes are made to the claims with the next response, that a new set of claims be submitted. If claims 1-4, 6-11, 13 and 17-18 remain unchanged from 7/29/04 they should be identified as "previously presented" because they are different from the versions presented on 1/7/02. If claims 5 and 12 remain unchanged from 7/29/04 they should be identified as "original" because they are the same as the versions presented on 1/7/02. If claims 19, 20 and 21 are unchanged relative to their presentation on 7/29/04 they should be identified "previously presented" with no underlining or strikes-through. If any of the claims 1-13, and 17-21 are amended in the response to this Office action, then they should be identified as "currently amended" and they should include underlining and strikes-through as appropriate.

Specification

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Reconsidered Allowability

3. The indicated allowability of claims 1-5 and 17-18 is withdrawn in view of newly discovered references. Rejections based on the newly cited reference(s) follow. The Examiner notes that the rejected claims do not teach a fluid driven motor receiving motor-driving fluid from the fluid inlet and outlet passages.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Holmes et al. (4,564,350).

Holmes et al teach a die plate (Fig 4, #38) for an extrusion apparatus, the die plate having first coupling means (Fig 4) for coupling the die plate on a first side thereof to an extruder defining a longitudinal axis (Fig 4, #60); apertures (Fig 4, #39), through which extrudate is received from the extruder and extruded for cutting into predetermined lengths by a cutter assembly (Fig 4, #38 and #50, the cutter assembly is interpreted to include the die plate because the pellets are cut against the surface of the die plate) disposable on the longitudinal axis, the cutter assembly having a motor (Fig 1, #54) for rotating a cutter transversely to the longitudinal axis into the path of movement of extrudate so as to sever the extrudate in use; the die plate having second coupling means for coupling the die plate on a second side thereof to the cutter assembly (Fig 4);

Art Unit: 1722

a fluid inlet passage (Fig 3, #76) for receiving fluid into the die plate for deliver to the cutter assembly in use, and a fluid outlet passage (Fig 3, #80) for receiving fluid from the cutter assembly for discharge from the die plate.

6. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Dudley (4,123,207).

Dudley teaches a die plate (Fig 4, #801) for an extrusion apparatus, the die plate having first coupling means (Fig 4) for coupling the die plate on a first side thereof to an extruder defining a longitudinal axis (Fig 4, #400); apertures (Fig 4), through which extrudate is received from the extruder and extruded for cutting into predetermined lengths by a cutter assembly (Fig 4, at #812, the cutter assembly is interpreted to include the die plate because the pellets are cut against the surface of the die plate) disposable on the longitudinal axis, the cutter assembly having a motor (col 4, lines 38-44) for rotating a cutter transversely to the longitudinal axis into the path of movement of extrudate so as to sever the extrudate in use; the die plate having second coupling means for coupling the die plate on a second side thereof to the cutter assembly (Fig 4); a fluid inlet passage (Fig 3, #404) for receiving fluid into the die plate for deliver to the cutter assembly in use, and a fluid outlet passage (Fig 3, #406) for receiving fluid from the cutter assembly for discharge from the die plate.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1722

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claims 1-2, 4-5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes et al. (4,564,350) in view of Guggiari (5,110,523).

Holmes et al teach a die plate (Fig 4, #38) for an extrusion apparatus, the die plate having first coupling means (Fig 4) for coupling the die plate on a first side thereof to an extruder defining a longitudinal axis (Fig 4, #60); apertures (Fig 4, #39), through which extrudate is received from the extruder and extruded for cutting into predetermined lengths by a cutter assembly (Fig 4, #38 and #50, the cutter assembly is

Art Unit: 1722

interpreted to include the die plate because the pellets are cut against the surface of the die plate) disposable on the longitudinal axis, the cutter assembly having a motor (Fig 1, #54) for rotating a cutter transversely to the longitudinal axis into the path of movement of extrudate so as to sever the extrudate in use; the die plate having second coupling means for coupling the die plate on a second side thereof to the cutter assembly (Fig 4); a fluid inlet passage (Fig 3, #76) for receiving fluid into the die plate for deliver to the cutter assembly in use, and a fluid outlet passage (Fig 3, #80) for receiving fluid from the cutter assembly for discharge from the die plate; the die plate has a peripheral edge adjoining the first and second sides, the fluid inlet passage and fluid outlet passage each having a radial portion extending radially through the peripheral edge toward a central area of the die plate where each passage terminates in a respective longitudinal portion extending through the second side of the die plate (Figs 3 and 4); including thermal insulation means between the fluid inlet and outlet passages and the extrudate apertures (Fig 6); the thermal insulation means has a gap into which a gas may enter (Fig 4).

Holmes et al. fails to teach the motor being a fluid driven motor.

Guggiari teaches a hydraulic (fluid driven) motor for the purposes of operating a cutter in an extrusion apparatus (col 3, lines 45-58).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Holmes et al. with a motor driven cutter wherein the motor is hydraulic as taught by Guggiari because it facilitates

Art Unit: 1722

controlling and keeping constant at a predetermined value the contact pressure of cutting elements against a die (col 1, lines 8-14 and col 4, lines 3-19).

11. Claims 1-2, 4-5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudley (4,123,207) in view of Guggiari (5,110,523).

Dudley teaches a die plate (Fig 4, #801) for an extrusion apparatus, the die plate having first coupling means (Fig 4) for coupling the die plate on a first side thereof to an extruder defining a longitudinal axis (Fig 4, #400); apertures (Fig 4), through which extrudate is received from the extruder and extruded for cutting into predetermined lengths by a cutter assembly (Fig 4, at #812, the cutter assembly is interpreted to include the die plate because the pellets are cut against the surface of the die plate) disposable on the longitudinal axis, the cutter assembly having a motor (col 4, lines 38-44) for rotating a cutter transversely to the longitudinal axis into the path of movement of extrudate so as to sever the extrudate in use; the die plate having second coupling means for coupling the die plate on a second side thereof to the cutter assembly (Fig 4); a fluid inlet passage (Fig 3, #404) for receiving fluid into the die plate for deliver to the cutter assembly in use, and a fluid outlet passage (Fig 3, #406) for receiving fluid from the cutter assembly for discharge from the die plate; the die plate has a peripheral edge adjoining the first and second sides, the fluid inlet passage and fluid outlet passage each having a radial portion extending radially through the peripheral edge toward a central area of the die plate where each passage terminates in a respective longitudinal portion extending through the second side of the die plate (Figs 3 and 4); including thermal insulation means between the fluid inlet and outlet passages and the extrudate

Art Unit: 1722

apertures (Fig 4); the thermal insulation means has a gap into which a gas may enter (Fig 4).

Dudley fails to teach the motor being a fluid driven motor

Guggiari teaches a hydraulic (fluid driven) motor for the purposes of operating a cutter in an extrusion apparatus (col 3, lines 45-58).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Dudley with a motor driven cutter wherein the motor is hydraulic as taught by Guggiari because it facilitates controlling and keeping constant at a predetermined value the contact pressure of cutting elements against a die (col 1, lines 8-14 and col 4, lines 3-19).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes et al. (4,564,350) and Guggiari (5,110,523) in view of Meakin (2,764,952).

Holmes et al. teach the apparatus as discussed above and also teaches the first coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate (Fig 4).

Holmes et al. fail to teach the second coupling means having an opening for receiving a respective fastener through the die plate.

Meakin teaches a second coupling means having an opening (Fig 1, the opening though which #29 projects) for the purpose of receiving a respective fastener (Fig 1, #29) through the die plate (Fig 1, #s 9 and 21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Holmes et al with a coupling

Art Unit: 1722

means having an opening for receiving a fastener through a die plate as taught by

Meakin because it enables a closer consolidation of the parts of the apparatus such that
the mechanism for rotating the cutters is within the extruder casing, not outside of it.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudley (4,123,207) and Guggiari (5,110,523) in view of Meakin (2,764,952).

Dudley teaches the apparatus as discussed above and also teaches the first coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate (Fig 3, #825).

Dudley fails to teach the second coupling means having an opening for receiving a respective fastener through the die plate.

Meakin teaches a second coupling means having an opening (Fig 1, the opening though which #29 projects) for the purpose of receiving a respective fastener (Fig 1, #29) through the die plate (Fig 1, #s 9 and 21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Dudley with a coupling means having an opening for receiving a fastener through a die plate as taught by Meakin because it enables a closer consolidation of the parts of the apparatus such that the mechanism for rotating the cutters is within the extruder casing, not outside of it.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes et al. (4,564,350) in view of Meakin (2,764,952).

Art Unit: 1722

Holmes et al. teach the apparatus as discussed above and also teaches the first coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate (Fig 4)

Holmes et al. fails to teach the second coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate.

Meakin teaches a second coupling means having an opening (Fig 1, the opening though which #29 projects) for the purpose of receiving a respective fastener (Fig 1, #29) through the die plate (Fig 1, #s 9 and 21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Holmes et al with a coupling means having an opening for receiving a fastener through a die plate as taught by Meakin because it enables a closer consolidation of the parts of the apparatus such that the mechanism for rotating the cutters is within the extruder casing, not outside of it.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dudley (4,123,207) in view of Meakin (2,764,952).

Dudley teaches the apparatus as discussed above and also teaches the first coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate (Fig 4, #825)

Dudley fails to teach the second coupling means having a plurality of mounting openings for receiving respective fasteners through the die plate.

Art Unit: 1722

Meakin teaches a second coupling means having an opening (Fig 1, the opening though which #29 projects) for the purpose of receiving a respective fastener (Fig 1, #29) through the die plate (Fig 1, #s 9 and 21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Dudley with a coupling means having an opening for receiving a fastener through a die plate as taught by Meakin because it enables a closer consolidation of the parts of the apparatus such that the mechanism for rotating the cutters is within the extruder casing, not outside of it.

Allowable Subject Matter

16. Claims 6-13, 19 and 21 are allowed.

Response to Arguments

17. Applicant's arguments with respect to claims 1-13 and 17-21 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

September 20, 2004